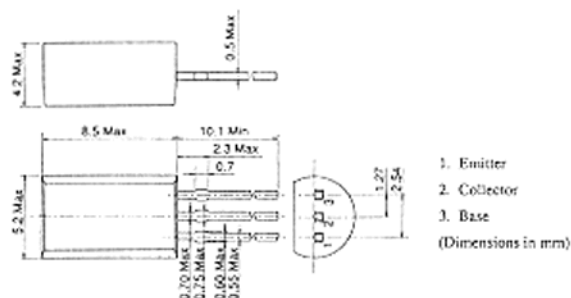


2SD666, 2SD666A

SILICON NPN EPITAXIAL

LOW FREQUENCY HIGH VOLTAGE AMPLIFIER

Complementary pair with 2SB646/A



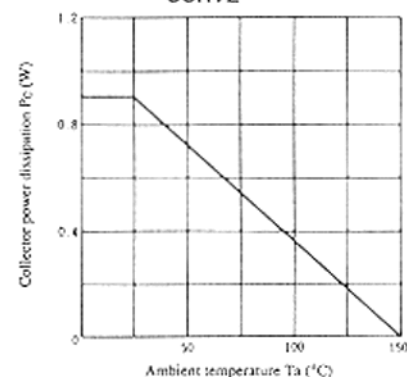
1. Emitter
2. Collector
3. Base
(Dimensions in mm)

(JEDEC TO-92 MOD.)

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Item	Symbol	2SD666	2SD666A	Unit
Collector to base voltage	V _{CB0}	120	120	V
Collector to emitter voltage	V _{CEO}	80	100	V
Emitter to base voltage	V _{EB0}	5	5	V
Collector current	I _C	50	50	mA
Collector peak current	i _{C(peak)}	100	100	mA
Collector power dissipation	P _C	0.9	0.9	mW
Junction temperature	T _j	150	150	°C
Storage temperature	T _{stg}	-55 to +150	-55 to +150	°C

MAXIMUM COLLECTOR DISSIPATION CURVE



■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

Item	Symbol	Test Condition	2SD666			2SD666A			Unit
			min.	typ.	max.	min.	typ.	max.	
Collector to base breakdown voltage	V _{(BR)CBO}	I _C = 10μA, I _E = 0	120	—	—	120	—	—	V
Collector to emitter breakdown voltage	V _{(BR)CEO}	I _C = 1mA, R _{BE} = ∞	80	—	—	100	—	—	V
Emitter to base breakdown voltage	V _{(BR)EBO}	I _E = 10μA, I _C = 0	5	—	—	5	—	—	V
Collector cutoff current	I _{CBO}	V _{CB} = 100V, I _E = 0	—	—	10	—	—	10	μA
DC current transfer ratio	h _{FE1} *	V _{CE} = 5V, I _C = 10mA	60	—	320	60	—	200	
	h _{FE2}	V _{CE} = 5V, I _C = 1mA	30	—	—	30	—	—	
Collector to emitter saturation voltage	V _{CE(sat)}	I _C = 30mA, I _B = 3mA	—	—	2	—	—	2	V
Base to emitter voltage	V _{BE}	V _{CE} = 5V, I _C = 10mA	—	—	1.5	—	—	1.5	V
Gain bandwidth product	f _T	V _{CE} = 5V, I _C = 10mA	—	140	—	—	140	—	MHz
Collector output capacitance	C _{ob}	V _{CB} = 10V, I _E = 0, f = 1MHz	—	3	—	—	3	—	pF

* The 2SD666 and 2SD666A are grouped by h_{FE1} as follows.

	B	C	D
2SD666	60 to 120	100 to 200	160 to 320
2SD666A	60 to 120	100 to 200	—

2SD666, 2SD666A

